

REPORT

OF THE

DELEGATES

TO THE

WARREN CONVENTION.

PUBLISHED BY ORDER OF

THE PHILADELPHIA BOARD OF TRADE

PHILADELPHIA:

PRINTED BY JOHN THOMPSON.

CARTER'S ALLEY.

1833.

At a Town Meeting of the Citizens of Philadelphia, held at the County Court House, on the 26th day of October, 1833—It was

Resolved, That a Committee of seven members be appointed to confer with the Board of Trade, in relation to the Canal Convention, to be held at Warren, in the State of Ohio, on the second Wednesday of November next, and to adopt such measures as may be proper to carry into effect the objects of the proposed Convention.

Committee—Josiah Randall, Alexander M'Clurg, J. M. Atwood, J. A. Brown, C. S. Smith, J. R. Burden, and Jacob Frick.

At a meeting of the Directors of the Philadelphia Board of Trade, held on the 29th of October, 1833, the following named members were appointed to confer with the Committee appointed at the Town Meeting held on the 26th of October, relative to the Warren Convention, viz:

Robert Patterson, Robert Toland, J. Haseltine, Mathew Newkirk, W. W. M'Main, T. P. Hoopes, and George Handy.

At a Joint-Meeting of the above Committees, the following named gentlemen were appointed Delegates to the Convention to be held at Warren, Ohio, the 2d Wednesday of November next, viz:

Josiah White,
Jacob S. Waln,
Abraham Miller,
T. P. Hoopes,

J. M. Atwood,
Alexander M'Clurg,
George Handy.

PHILADELPHIA BOARD OF TRADE.



A special meeting of the Philadelphia Board of Trade was held on the 16th inst. at the Merchants' Coffee House, to receive the Report of the Delegates to the Warren Convention, THOMAS P. COPE, Esq., President of the Board, in the Chair.

At a meeting of the Board of Directors, held on the 11th inst. it was unanimously

Resolved, That the thanks of the Board of Directors, be presented to the Delegates to the Warren Convention, for the able and satisfactory manner in which they have discharged the duties committed to them, and that their Report be referred to a Committee to present the same at a special meeting of the Association, to be held on the 16th inst.

General Patterson, Chairman of that Committee, presented to the Chair the Report of the Delegates, which was read, and is as follows :

The Delegates appointed to represent the City and County of Philadelphia in the recent Convention held at Warren, Ohio, respectfully submit herewith to the Board of Trade a statement of their proceedings. In the selection of materials for the present Report, much embarrassment has been experienced from the number and variety of topics suggesting themselves for consideration, which it was yet impossible to present, even in moderate detail, without swelling this communication beyond its proper limits. As many of these, however, are believed to have an important bearing upon the interests of our City and State, they will form the subjects of distinct statements to be appended to this report, or, to be hereafter separately submitted.

Agreeably to the expressed wishes of your Board, that the Delegation should obtain whatever information might be found practicable in their journey through Pennsylvania, respecting the state of our public improvements, and the degree of reliance which could be placed upon them as a medium of communication for the ensuing season, they proceeded to Pittsburgh by the northern route, which leads for a considerable portion of the distance immediately along the line of the Western Canal. At Harrisburg they had an interview with the Governor and Canal Commissioners, who manifested a deep interest in the objects of

the Convention, and readily furnished the desired information upon various points of enquiry.

From the results of their observations in their tour to and from the west, the delegation are happy to state that they have been, on the whole, highly gratified with the present appearances of the public works, as it respects their good order and general character of stability, and it is highly satisfactory in view of our present wants and interests to know that we are in the actual enjoyment of a line of Canal, connecting the Eastern and Western waters of our State, adequate to all the purposes contemplated in its formation, and to which time is daily adding increased permanency and strength. To the excellence of the Portage Rail Road across the Allegheny ridge, your delegation can especially bear unhesitating testimony; the work may be regarded as furnishing the most effectual communication between the two divisions of the Canal, which circumstances admit, and in its execution is highly creditable to the Engineers, under whose supervision it has been placed. In passing over this interesting and important section, and in witnessing the triumphs which skill and perseverance have gained over the obstacles of nature, by thus opening safe and easy channels to commerce, through the wildest defiles and most rugged fastnesses of our majestic mountains, the impression could not be resisted, that the present generation had not only opened for themselves new sources of prosperity, but that they would be bequeathed to our descendants, to be cited in the future History of Pennsylvania, as monuments of bold and energetic, as well as successful achievement.

At Pittsburgh, the delegates were joined by a highly respectable deputation from that city and the county of Allegheny, and descending, in company, the Ohio River to Beaver, they reached Warren on the evening of the 12th November.

Upon the morning of the ensuing day, the Convention, consisting of one hundred and nine members, was duly organized, and proceeded at once to the consideration of the important objects of its assemblage, viz:—to decide upon the most eligible mode of uniting the public works of Pennsylvania with those of the State of Ohio, and to fix the most suitable point of junction.

Three different methods for forming the proposed connection were presented.

1st. A canal commencing at Akron on the Ohio Canal, and passing the summit at Ravenna, by the valley of the Mahoning, to meet the termination of the Pennsylvania improvements, at or near New Castle.

2d. A Rail Road from Massillon on the Ohio Canal, to the mouth of little Beaver, or by a continuous line to Pittsburgh.

3d. A Canal from Bolivar, on the Ohio Canal, by the route of Sandy Creek and little Beaver, to unite with the Pennsylvania Canal Basin at the mouth of Big Beaver.

The merits of these several plans were explained with much ability and zeal by their respective advocates, and valuable information furnished respecting the character and products of the different counties in the vicinity of the lines of junction under consideration. As is already known to your board, the task of selection from the various routes was finally devolved, by an unanimous vote of the Convention, upon a Committee consisting of the Delegates from Philadelphia and Pittsburg. This mark of confidence, joined to the deep interests which the City of Philadelphia as well as the State of Pennsylvania had at issue, upon a judicious choice of the place and mode of connection, imposed upon the Committee the new and unexpected duty of making a personal examination of the specified lines, and they commenced the undertaking immediately after the adjournment of the Convention. This took place on the 15th ultimo, after a session of three days, marked through its whole course by the manifestations of mutual respect, courtesy and kindness among the Delegates. The importance attached by the citizens of Ohio to the deliberations and action of this convention may be inferred from the numerous representation from the various counties whose interests were supposed to be more directly affected by the choice of a connecting route, and especially from the high character of the gentlemen deputed as their commissioners.

Of the result of a faithful and impartial examination of the proposed modes of connection, the Board have been apprised by the published document, signed by the Delegates from Philadelphia and Pittsburgh, a copy of which, marked A. is herewith subjoined. It is only necessary to add, that in the choice of a Canal by the Mahoning route, there was an unanimous and undoubting concurrence, and they unhesitatingly recommend this line of junction to their fellow citizens, as that upon which their attention and efforts should be concentrated. The soil and character of the ground through which it passes, are eminently favorable, the supply of water abundant, and the cost of construction alike moderate, and of definite calculation.

The advantages of the contemplated connection with the Ohio Canal may be gathered from the following facts, which although presented, as your Delegation propose to state them, in the simplest language, cannot fail to establish the importance of immediate and decisive action in relation to the important subjects which they involve.

1st. The junction Canal will open at once to Philadelphia, the

trade of the interior of Ohio, and of the Upper Lakes, from both of which it is now almost wholly debarred for the want of the means of communication. Any estimate of the importance of the Lake trade formed upon present data would be delusive, inasmuch as the Territories bordering upon them are of comparatively recent settlement, and they are just now rising into importance. It may be well to state, however, that the interior of Illinois is already reached through the waters of Erie, Huron and Michigan, and the contemplated chains of connection with them by Canals and Rail Roads through that State, Indiana and Missouri, demonstrate with unanswerable force, the necessity of a connecting line, uniting our improvements with Lake Erie, at the most advantageous point. Upon such a junction being effected, by means of an union with the Ohio Canal, the City of Philadelphia will enjoy the advantages of a communication with the Lakes by a route at least one hundred miles shorter than from New York to the same point, and by a safer and more certain channel. To this valuable trade, there will also be a ready access at seasons of the year when the avenues of communication with our sister City are closed by the higher Northern latitude of her Canals. From information derived by your Delegates in their late journey, it appears that the harbor of Cleveland opens upon an average at least by the first of April, while that of Buffalo remains closed five or six weeks beyond this period. During this interval, there is an uninterrupted navigation of the South Western portion of Lake Erie, and at a season when it is of the first importance to the agriculturist that he should have an access to an Atlantic market for his produce, accumulated during the winter, and of equal importance to the merchant, that he should obtain his Spring supplies of goods. The causes of the later obstructions of the harbour of Buffalo, and consequently of the New York Canal, may be readily perceived from the fact that that port is situated nearly a degree and one half Northward of Cleveland, and more especially from the formation of the Lake, which in consequence of its narrowing towards the Niagara river, causes an accumulation of the ice at that point, which is brought by the wind and current of the Lake from the upper waters of Superior, Huron and Michigan. The same superiority of relative position will accrue to our City in regard to a communication with the interior of Ohio, with this important additional fact. The evils of a delay of access to an Atlantic market are enhanced in proportion to the more Southern location of any section interested; inasmuch as in the case of all articles of a perishable nature, as are some of the chief staples of Ohio, the necessity is imperative, either of a risk of a total loss of property, or of an

abandonment of some of the most profitable articles of production and export.

2. It is a matter beyond all dispute, that the projected extension of our Canal communication to the Ohio improvements, will secure to us the means of retaining the trade of the southern portion of the Valley of the Mississippi, including the entire West, now supplied by means of the Ohio river; the loss of which must be expected to ensue, if prompt and vigorous measures are not at once adopted to open channels of conveyance of goods at the seasons of a low stage of water in the Ohio, which offers at present our only mode of conveyance from Pittsburgh. This imperfect supply of water occurs usually at the season of our most active fall trade, and although it is freely admitted that the communication is not always suspended, even during this season, yet the distressing uncertainty relating to it, will on the principles of common prudence, forbid a dependance on such a mode of transportation, when more certain channels are of easy access.

It appears to your Delegation a consideration of prime importance, that our fellow citizens should be awake to the fact, that the proposed junction is not a measure provided simply for greater convenience of transportation; nor one of mere enterprise, justifiable and praiseworthy, perhaps, other circumstances being favourable, for the enlargement of the sphere of our mercantile operations; but as a measure of necessity, of strict self defence, and indispensable to the retaining of the portion of the western trade we now possess.

Whatever this trade is worth to the City of Philadelphia—whatever employment it gives to the industry of its mechanics, its artisans, and its merchants, should enter into the estimate of the importance of an effort to retain it.

The disadvantages under which Philadelphia at present labors, for want of a certain communication with the West, would indeed be as gloomy as they are prominent, did we not possess the sure means of providing a remedy, which will not only supply our present deficiencies, but lead to the attainment of new and additional advantages.

From Philadelphia to Akron, the proposed point of junction with the Ohio Canal, the distance is less by about two hundred miles than from New York, the transportation of merchandise, unattended with the risk and delays incident to the Lake navigation; and finally, at a cost of conveyance less than by any other channel. Nor should it be regarded as a matter of inconsiderable importance that the proposed canal insures a medium of communication between the east and the west available, alike in peace or war, and free from the exposure of passing the territories of a

foreign power, possessing the whole northern shore of Lake Erie.

It is proper to state the unanimous conviction of the delegation, that any plan of communication will but imperfectly secure the anticipated advantages, which does not contemplate an unbroken communication from the western base of the Alleghany to the Ohio canal; and by that means avoiding the expense and delay of transshipments. This will involve the necessity of an extension of the canal from Alleghany Town, to meet the excellent Beaver Canal, already completed at Brighton, a distance of about twenty-eight miles, and which may be passed on a single level.

The promised advantages to be afforded by this Canal, are an entire connected communication from the City of Philadelphia, by the Columbia Rail Road, or by the Schuylkill, Union, or Pennsylvania Canals, to any point on the Ohio Canal, and at all stages of the water to the Ohio river at Portsmouth, and to Lake Erie by Cleveland, to open to the citizens of Philadelphia, a new and extensive trade to the States of Ohio, Indiana, Illinois, and Michigan, and present a communication to a market for the trade of the western part of Lake Erie, much earlier than it could be reached by any known channel; its further advantages would be an immediate increase, and at no distant day doubling the tolls of the Schuylkill, Union, and Pennsylvania Canals, from this immense trade passing along their shores.

The ways and means necessary to accomplish this desirable object, your delegation leave to your respectable body to point out, as more properly belonging to them; but they cannot suffer themselves for one moment to believe that funds will be wanting to complete a work which is calculated to enhance the value of every house and lot in the city, and to augment the commerce and wealth of every man interested either directly, or indirectly, in the prosperity of Philadelphia.

On motion of M. Newkirk, Esq. it was unanimously

Resolved, That the Report of the Delegates to the Warren Convention be accepted, and published in the daily papers, and that one thousand copies be printed in pamphlet form, for the use of the association, and citizens generally.

THOMAS P. COPE, President.

GEO. W. TOLAND, Secretary.

(A)

REPORT.

The undersigned, to whom were referred the representations made to the Convention on behalf of the several projects for uniting the Canals of Ohio and Pennsylvania, respectfully Report—

That they could not fail to be deeply impressed with the responsibility of the task imposed upon them, as well as with a grateful sense of the confidence implied in their appointment. The first impulse was to decline, altogether, a trust by no means desired or anticipated on their part, and the discharge of which, might well be expected in any event, to be viewed invidiously; but the frank and candid spirit which characterised the proceedings of the Convention, assured them that their labors however imperfect, would be regarded with indulgence; and they did not feel at liberty, therefore, to interpose a sullen negative to the course which their associates regarded as tending to promote the great objects in view.

In the attempt to fulfil, conscientiously, a duty so delicate and important, it has been their anxious object not only to keep steadily in view the very able reports referred to them, but to seek, in every quarter, for such further facts and suggestions as might aid in reaching a just conclusion. Shortly after the adjournment of the Convention, they proceeded, by the line of the northern route, to Akron, and thence descended the Ohio Canal to Masillon. From this point, some members of the committee pursued the route of the proposed rail road; whilst the others made their way to Waynesburgh, which was indicated as the most suitable point from which to commence the examination of Sandy Creek. At Waynesburgh, several very intelligent gentlemen were found in attendance, with the surveys of the Sandy and Little Beaver Canal route, and accompanied the party up the valley of Sandy Creek. The two divisions of the committee re-united at Hanover, and from this point enjoyed the advantage of the attendance of Mr. Joshua Malin, who had a large share in the labors exhibited in the report of Major Douglass. On reaching New Lisbon, the undersigned were gratified by the opportunity of a personal conference, on the subject of their enquiries, with many of the most respectable inhabitants. Here, also, two Addresses were read and submitted to them; one by E. Potter, Esq. supplemental to that presented to the Convention; the other by A. W. Loomis, Esq., exhibiting the facts and arguments in favor of a canal by the southern route, and dwelling more particularly on the sub-

ject of the supply of water. There was also a statement communicated of the amount of merchandise sold in a single year within the county of Columbiana. These interesting papers, marked respectively, A, B, and C, are appended to the present report. From New Lisbon, the committee proceeded to the mouth of the Little Beaver, and thence along the margin of the Ohio river to Beaver, accompanied throughout by Mr. Malin. They have at length reach this place; and, under the pressure of engagements elsewhere, rendered exceedingly urgent by an absence of unexpected length, they hasten to state, as briefly as possible, the conclusions at which they have deliberately arrived.

The question as to a *Rail Road* ought, perhaps, in order of time, to be first adverted to, as being one which, in the view taken of it by the committee, at an early period, involved no matter of detail or consideration connected with a personal examination. As such a work must depend mainly, if not exclusively upon private subscription, it became indispensable to inquire into the present state of feeling on this subject, in the quarters from which aid must necessarily be sought; and it was at once ascertained, beyond all doubt, that the prospect of obtaining subscriptions was utterly hopeless. When to the powerful arguments, drawn from experience, which were represented as dissuading from such a plan of improvement, in reference to transportation, was added the fact that this work is not an independent one, but designed to connect two canals, and that its employment would involve a double trans-shipment, the committee felt, that to keep it longer in view, was to put in peril a really attainable object. It is a source of high gratification to add, that as the convictions of the committee necessarily unfolded themselves in frank conference with gentlemen most deeply interested in this project, they were met in a spirit of the utmost liberality and candor. No reason is seen to doubt that the most judicious location for the contemplated work was made by Lieut. Mitchell.

Putting, then, a rail road out of view, there remain only the *northern* and *southern* routes for a connecting *canal*, and in coming to a decision between these, the undersigned are unanimous.

The great question in reference to a canal—and one compared with which all others are, in truth, insignificant—is, of course, as to the supply of water. If an anxious and distressing uncertainty on this point attach to the work, no safe calculation can be made on its value as a stock, or its usefulness as a medium of conveyance. Where the supply is inadequate or precarious, we cannot assume, in an estimate of revenue, the maximum of boats which might possibly, in a given season, if presented exactly at the desired period, be transported on the canal. The chances of disappointment will, in a great measure, suffice to dissuade from resort to a channel whose failure, at a critical moment, may involve irreparable mischief. We must constantly bear in mind that ours will be only *one* of the modes of communication between the east and the west; and that its productiveness must depend

on inspiring implicit confidence, not only in the cheapness and safety of this route, but in the certainty of its operations.

The committee are satisfied that a canal, by Sandy and Little Beaver creeks, will not be adequately supplied with water. The allowances in practice, found so indispensable, are, in the estimate for this route, very low; strikingly so, when compared with those on the other route by Colonel Kearney. The contemplated resort to steam engines is deemed wholly inadmissible. Nor ought we to overlook the admitted tendency of the streams relied upon, to shrink up with the improvement of the country. The number of boats, also, likely to pass through this work, though advantageously compared, by the engineer, with the number on the New York Canal, at a particular period, falls far short of the subsequent expansion of business in that quarter. It would indeed, be deeply mortifying if, instead of looking to the vast commerce that await this connexion, and providing for, and urging its enlargement, we should have, hereafter, to look with alarm at the increasing demand for transportation as a satire on our own want of forecast. The undersigned will only add, that the apprehensions with which they approached this route, founded on estimate and calculation, were more than realized by actual observation on the ground: and there was forced upon them, a conviction, stronger, perhaps, than can be conveyed by words.

After the foregoing remarks it is, perhaps, superfluous to say to the Convention, that the northern route, by the Ravenna summit, is the one which the undersigned unanimously recommend. Of the abundant supply of water for that canal no doubt can be entertained; and it is ardently hoped that sectional feelings will be discarded and the thought and exertions of all be steadily directed towards the accomplishment of an object of such vital importance to the whole of the two States.

It is proper to note distinctly, that the canal thus recommended, is one which shall connect the two great thoroughfares of Ohio and Pennsylvania, by an unbroken chain of canal communication from Pittsburgh to Akron. A work, possessing this character, is called for, in express terms, by the Charter under which it is, at present, contemplated to act; and is, moreover, in the opinion, of the undersigned, indispensable to enable us to compete successfully with the channels of conveyance already open. A break in this chain, by a railroad from Beaver to Pittsburgh, or by reliance on steam power to tow up canal boats, when the state of the river shall admit, would, in the opinion of the undersigned, render the work altogether incompetent to effect the great objects which are aimed at, and which it is so well calculated, under enlightened management, to achieve.

In concluding this Report, the undersigned cannot but feel that it is probably the last act of their connexion with an assemblage which forcibly impressed every one of them with sentiments of respect and regard. The result of the Convention is, of course, like every thing human—a matter of uncertainty; but they must ever consider the period as well and happily spent, which brought them into intimate associa-

tion with an estimable body of our fellow citizens, in a quarter of our common country, new to most of them ; and they will delight to cherish the feeling of just national pride, with which they have traversed a great and flourishing state, whose prosperity may be distinctly traced to the indefatigable industry and sound morals of her intelligent and enterprising people.

Delegates from the city and county of Philadelphia :

Abraham Miller,	Josiah White,
Jacob S. Waln,	Thomas P. Hoopes,
George Handy,	Alex. M'Clurg,
John M. Atwood.	

Delegates from the city of Pittsburgh, and county of Allegheny :

Richard Biddle,	Charles Avery,
Geo. Miltenburger,	Alba Fisk,
Geo. Cochran,	William Lecky.
Wm. Robinson, Jr.	

Pittsburgh Nov. 23, 1833.

(A)

The Committee, appointed by the Convention at Warren, for the purpose of obtaining information of a local character, deemed important in the contemplated connexion between the Pennsylvania and Ohio canals, and to communicate the same to the committees appointed by the citizens of Philadelphia and Pittsburgh, would respectfully advert to reports and facts, that may in their opinion, have an important bearing, upon the proposed connexion. As many rumors, emanating, from a creditable source, have gone to the public, unfavourable as to the supply of water on the summit level of the Sandy and Beaver canal, we would respectfully advert to the documents accompanying this statement, hoping thereby to satisfy the committees, that those rumors are unfounded.

And first, in order, we would respectfully refer to the report of Major D. B. Douglass, and trust that it will receive a full, fair, and impartial examination.

We would also refer to the map or draft of the summit level of the canal drawn by J. Williard, Esq., county surveyor, and also surveyor of the canal line under the direction of Major Douglass. From that map, together with the accompanying certificates of Mr. Williard, this fact is fully established, that the extent of country drained by the streams flowing into the summit level of the canal, is seventy-five square miles, instead of sixty-five as heretofore stated by one of the Committee. We would also respectfully refer to pages two, three and four, of General Bernard's report upon the supply of water on the summit level of the Chesapeake and Ohio canal. In that report General Bernard assumes this position, 36 square miles of country drained, is sufficient, with the assistance of reservoirs, to supply the summit level of that important improvement : We would earnestly but respectfully urge the attention of the Committee to that part of the report of General Bernard, the facts there stated, and the deduction from those facts, and request their application to the contemplated connexion between the Pennsylvania and Ohio canals, by the waters of the Sandy and Little Beaver.

We would further request the attention of the committee to the facilities with which any number of reservoirs, that may be deemed necessary, can be formed, should the natural supply be found insufficient. Although we wish not to show invidious comparisons, we cannot but here remark, that four reservoirs, including more than eleven miles of feeders, are deemed necessary for the supply of the summit level of the contemplated canal to Akron, at a cost of more than seventy-six thousand dollars ; and the friends of that improvement deem it one affording extraordinary facilities. We unhesitatingly say, from our own knowledge of the country drained by the streams flowing into the summit level, that much more capacious reservoirs may be formed on the Sandy and Beaver summit, with far less expense ; and we appeal with confidence to the observations made by the committee, for the truth of the above statements.

We would respectfully, but earnestly, request the attention of the committee to the facts last suggested, and, that in forming their opinion on this subject, (important to them, as also to us) they will examine with care all the facts and suggestions here made:---If the committee should be satisfied upon examination, that this canal route has the important requisite, a sufficient supply of water upon the summit level, any information we can give, respecting the eastern and western division, will be superfluous;

their own observations and Maj. Douglas's report, will be far more satisfactory. We would make one other remark, that the important material, stone, for locks and aqueducts, is abundant on the whole line, and may in that particular (as the committee believe) be favourably contrasted with the Mahoning route. The suggestions here made respecting the summit level, are made for the purpose of drawing the attention of the committee, particularly to the supply of water upon the summit, and leading *them to investigate the subject fully in all its bearings.*

Our deep solicitude for the improvement, must be our apology for thus earnestly requesting this examination. For the considerations offered in favor of the Sandy and Beaver Canal route, and its advantages over any other connexion, we would respectfully refer the committee to a work, of which, one of the members of the Committee from the city of Pittsburgh, is the author and compiler, where they are fully and distinctly set forth. Your committee would refer to a report of a local committee, (appointed by the citizens of Lisbon) which accompanies this; in which the question of the supply of water upon the summit level, is more fully and forcibly discussed; which report, with the accompanying documents, contains information of an important local character.

All which is respectfully submitted,

ELDERKIN POTTER,

On behalf the Committees.

(B)

To the Delegations from Philadelphia and Pittsburgh, now examining the respective routes, proposed for a communication between the Pennsylvania and Ohio Canals.

The undersigned, a Committee appointed at a public meeting of the citizens of New Lisbon, beg leave to present to your consideration, a few facts and suggestions in relation to the Sandy and Beaver Canals. Situated as you are, we are sensible that partisan statements and suggestions, must be regarded with caution and received with many grains of allowance. That self-interest, bias, and prejudice, are operative alike upon the perceptions and declarations of candid and honourable men you have doubtless had abundant evidence, during your recent observations. We do not claim to be exempt from their influence; nor do we ask or expect to receive from your hands, greater indulgence than shall be extended to others.

We, however, pledge ourselves, to state nothing as *fact*, which we do not at least *believe* to be *true*: all that we ask is, that our suggestions and reasons should be received, as we doubt not they will be, in a spirit of liberality, and credited in your estimate of conflicting claims for what they are worth. It is known to us that three rival projects, each claiming superior advantages, have been presented to the attention and have courted the preferences of the citizens of Philadelphia and Pittsburgh, and that to you has been delegated the important trust of deciding upon their respective pretensions. Intimations have been received, that one of those projects has encountered your disapprobation, and is consequently excluded from further competition. Two projects only, remain: the Mahoning, whose pretensions to your favour, are vigorously pressed and ably sustained by extensive and powerful influence, conspicuous and elevated talent, unremitted and untiring industry, and the Sandy and Beaver project of whose claims to your favourable regard, we are the humble advocates.

It is our purpose to vindicate not to eriminate; to defend not to attack. Though our elaims may have been treated with severity and injustice, and perhaps in some instances with ridicule and reproach, by those whose interests would be affected by our success, still we feel no disposition to retaliate. Though when smitten upon one cheek we may not possess christian humility enough to present the other, we shall not dishonour our cause, even if in our power, by the exaction of an eye for an eye, or a tooth for a tooth. We rely for success upon the merits of our own claims and not upon the want of merits in those of our competitors; upon firmness in defending our own pretensions, and not upon chivalry in assailing those of our opponents.

Reports have gone abroad, assuming a definite and tangible form, and promulgated by responsible authority, reports which have come to your ears and have been pressed upon your attention in the most imposing manner, that our project is impracticable. These reports have originated from interested sources, and have sprung, as we believe, from a spirit of rivalry. They have been circulated by those whose means of knowledge were far less than their disposition to prejudice, and whose zeal in undervaluing our claims, has been proportionate to their interest in our defeat. That *some* who participated in that circulation, believed them *true*, we as little doubt as that *others* who shared liberally in their circulation had reason to believe them *untrue*.

Still the charges have been made, and, if found true, must of course silence our pretensions. The examination of this question, we can readily imagine, will be a preliminary step in your investigation of our routes, for upon the determination of it must depend the necessity and policy of ulterior proceedings.

We aver that our project is not only practicable but feasible; that an abundant supply of water for the summit and dependent levels can be obtained without difficulty and without unreasonable expense. The question naturally presents itself, what quantity of water will be requisite to supply the summit level between Beaver and Sandy, the dependent levels, and leakage in passing from either extremity of the summit to lower levels? the determination of this question, will depend upon the quality of the soil on the summit level, the lift and dimensions of locks, and the number of boats to be passed in a given time. In forming an estimate of the quantity of water that will be required to supply leakage and filtration on a given extent of canal, much it is evident will depend upon the quality of soil, the elevation or depression of ground over which the canal passes. When a canal is located on depressed ground of a tenacious and retentive quality, bounded on either side by high lands sloping towards its line, a comparatively small quantity of water can escape by leakage and filtration, but when on the other hand a line of canal is run upon elevated and siding ground of a porous and absorbent nature, large quantities of water will penetrate the banks and pass off by absorption to lower levels. It appears from the report of Major Douglass, that a large portion of the summit level between Sandy and Beaver is of the former description. It appears from the report of the Ohio canal commissioners and one of the engineers in 1825, that the Licking summit and dependent levels are forty one miles in length and two thousand three hundred and twenty five cubic feet per minute are the estimated expenditure by evaporation, leakage and filtration for that length of canal, which would average about fifty seven cubic feet per minute per mile.

It is proper however to remark, that, of the above distance, it was estimated that about eight miles of the line, including the deep cut, and some portions in the vicinity of the reservoir, would feed itself. In a report on the French Creek feeder by Major Douglass to the board of canal commis-

sioners of the State of Pennsylvania, dated January 1, 1827, it is estimated that the loss by evaporation from the surface of a canal forty feet wide, is about two cubic feet per minute.—He states in that report, that, “on the New York canal it was observed during the first years of the construction, that the expenditure for evaporation and filtration amounted to upwards of one hundred cubic feet per minute; but as the supply of water is very abundant, it is presumed that the canal was not as carefully puddled as it might have been; when this has been done, the expense of water attributable to the causes (evaporation and filtration) may be reduced to half the amount and probably to as little as one-fourth after sufficient time has been allowed for the bank to settle.”

Major Douglass states, in his report, that a considerable portion of the summit and dependent levels is a strong clay, in which, very little water can be lost by soakage, and even the most unfavorable parts contain so considerable a mixture of clay, that, with very little care in the construction, they may be rendered nearly water tight. Of the correctness of this statement it is presumed some of you must be satisfied from an actual inspection of the ground. He proceeds to state, that, under these particular circumstances, he considers twenty-two cubic feet per minute per mile, as entirely sufficient for the supply of losses of soakage and evaporation on the middle division. We will, however, assume the losses at 25 cubic feet per minute, and length of middle division and dependent levels twenty miles, there will require an expenditure of five hundred cubic feet per minute. He estimates that one hundred and twenty cubic feet per minute must be allowed for leakage and waste at the gates. This quantity added to the five hundred feet before mentioned, will produce an aggregate of six hundred and twenty feet per minute: all losses on the summit and dependent levels are covered by the preceding provisions, except lockage.

The extent of this loss will of course depend upon the capacity and lift of the locks and the number of boats to be passed in a given time.—Let us suppose that a boat in ascending to, and descending from a summit, will draw from the summit two locks full of water, one in ascending and another in descending; but the same water will admit the passage of a boat in an opposite direction; the locks on the Ohio canal, through which boats pass in ascending to and descending from the Licking summit, are ninety feet in length, fifteen in width, and eight in height or lift; the commissioners in their report to the the Legislature in 1825, say, that to pass one hundred boats per day in one direction across the Licking summit, through locks of the foregoing lift and capacity, would require fifteen hundred cubic feet of water per minute. Should these boats be met in every instance by boats passing in an opposite direction, two hundred boats might be passed with the same quantity of water.

We think it a fair and reasonable calculation that, if a summit will supply water for the passage of sixty-six boats per day in one direction, one hundred boats per day may, in the ordinary course of business and without delay, be passed over the summit in opposite directions. Allowing each boat to carry twenty-five tons burthen, one hundred boats would admit the passage of two thousand five hundred tons per day across the summit; there would, in our estimation, be no necessity or use in having a supply of water for a greater quantity. It would then require one thousand cubic feet of water per minute to supply the passage of sixty-six boats per day, in one direction, through locks of eight feet lift.—By reducing the lift from eight feet to six feet, as proposed by Major Douglass, the lockage water would be reduced to, say, seven hundred cubic feet per minute in passing sixty-six boats in one direction over the summit, or one hundred in both directions.

The latter quantity added to six hundred and twenty feet per minute, required for evaporation and soakage, amounts to one thousand three hundred and twenty feet per minute to cover all expenditures on the summit and dependent levels. Let us next enquire whether we can command an adequate supply. Our available resources are, first, streams that can be conducted to the summit by excavation, second, the middle fork of Beaver that can be thrown upon it by steam power, third, a stratum of three feet thick in the canal itself, fourteen miles in length (collected during floods,) and fourth, artificial reservoirs to be filled by the waters of *Cold run, West fork and Davis's Branch of Sandy*. The streams that can be conducted to the summit level by excavation were repeatedly gauged during a very dry season and yielded, as appears from the report of Major Douglass, an average supply of seven hundred and twenty-two feet per minute. This deducted from the estimated expenditures of one thousand three hundred and twenty feet, will leave a deficiency of five hundred and ninety-eight feet per minute. From our second resource, the middle Fork of Beaver, Major Douglass states, that from seven hundred and sixty to eight hundred and sixty cubic feet per minute may be obtained. We will, however, estimate the supply from this source at five hundred and ninety-eight feet which will precisely cover our estimated expenditure. From our third resource, the surplus water of the canal on the summit, it appears from the statement of Major Douglass in his report, that one hundred and fourteen cubic feet per minute can be drawn during sixty days in each year; it may be here remarked, that these supplies have been obtained in the most satisfactory manner. The streams were frequently and carefully gauged during a remarkably dry season and under circumstances which have impressed upon our minds a perfectly satisfactory conviction of their accuracy. The gentlemen who conducted the examinations and made the experiments, are known to us to be men of truth, probity and intelligence, and they acted under circumstances and obligations to their employers and the public, imperiously requiring a scrupulous regard to accuracy, fidelity and truth.

To dissipate all doubts, supply all defects, provide for all contingencies, and in fine to 'make assurance doubly sure,' we proceed to an examination of our last resources. We rely upon the map and survey of the County surveyor, to show that the waters of streams draining more than seventy square miles, may be thrown into reservoirs, during floods, for the supply of the canal during dry seasons. We have no hesitation in declaring our firm persuasion and perfect confidence, that more than one thousand cubic feet per minute can be realized from this source alone. In making this statement, we rest with satisfaction, upon the extent of country that can be drained, and also upon the conclusive inferences to be drawn from the reports of the Ohio canal commissioners and the United States engineers. In a report of the United States engineers in December 1826, they state with confidence that thirty-six square miles of country round the summit level of the proposed Chesapeake and Ohio Canal, will, during the fall and winter, supply for a reservoir fifty-one million six hundred and thirty thousand seven hundred and ninety-six cubic yards, or more than one thousand three hundred and seventy-seven millions cubic feet of water. They deduct from this quantity one third for evaporation, leakage, and absorption: but deducting two thirds, the residue would yield more than fifteen hundred cubic feet per minute during one hundred and twenty days of the driest season in each year. The calculation of the United States engineers is based upon much observation and a great variety of experiments. The correctness of the calculation is strongly fortified by the estimate of the Ohio canal commissioners, that the reservoir to supply

the Licking summit which contains more than seven hundred millions cubic feet, will be filled, during the floods, in the short space of *twenty days*. A comparative view of the Licking summit and dependent levels, and the waters relied upon for a supply, and of the Sandy and Beaver summit and the waters relied upon for a supply, will place the foregoing questions in a clear point of light. The Licking summit and levels depend upon it for a supply, including eight or ten miles of line, which it is supposed will supply itself, are about forty-one miles in length.

The Commissioners estimate the expenditures by evaporation, leakage, and filtration for this distance, at two thousand three hundred and twenty-five cubic feet per minute, and one thousand five hundred cubic feet per minute for lockage for one hundred boats per day, making in all three thousand eight hundred and twenty-five cubic feet per minute. In their report to the Legislature, dated January 8, 1825, they say that, "to provide for this expenditure, there may be drawn from

The reservoir per minute	3000	cubic feet
From the south fork and its tributaries	250	Do.
From little walnut to supply lower levels and all its valley say	200	"
From Rackoon Fork	600	"
<hr/>		
Total amount	4050	Do.

Making altogether a supply, during dry seasons, of four thousand and fifty cubic feet per minute, exceeding the estimated expenditures two hundred and twenty-five cubic feet." On an inspection of the preceding statement, it will readily be perceived, that the water afforded by the running streams is not sufficient to supply the loss on the summit and dependent levels by evaporation, leakage, and filtration by eleven hundred and seventy-five cubic feet per minute: that this deficiency, together with lockage, amounting to one thousand five hundred cubic feet per minute is to be supplied exclusively by the reservoir, and that after taking from the reservoir this supply, there will be a residuum of two hundred and twenty-five cubic feet per minute. It will be observed that so far from relying upon reservoirs as on the Licking summit for a supply of any part of the loss on the summit level by leakage and filtration the running streams will afford a surplus of more than two hundred cubic feet per minute applicable to lockage and wastage at the gates of the locks. It is believed that experience has amply tested the sufficiency of water on the Licking summit, and we cannot doubt that the same unerring arbiter would demonstrate the truth of our averment, that our project is practicable and that the summit can be abundantly supplied with water. Invoking your careful attention to the documents with which you have been and will be furnished in relation to this important question, to the verbal communications and explanations which you have received from sources entitled to confidence and credit, to your own examinations of the country and streams, we look with confidence to a favourable result. In relation to the supply of water on the lower levels, we shall make no suggestion, never having had that supply questioned.

The important question now arises, which project presents advantages over the other, that will justify a decision in its favour? This we are aware might open a wide field for discussion. The friends of the northern route, we are advised, have entered that field and presented in lengthened detail and glowing colours to your attention, every consideration that fact or fancy could enlist in favour of their pretensions. It is not our purpose to follow their example. It is unnecessary for us to do so. We shall state

but few facts and make but few suggestions. In relation to the comparative distances of the two routes, we admit they have the advantage in the Lake trade by fourteen miles, and in the southern, we claim the advantage over them by sixty-nine miles.

It has been the policy of the advocates of the northern project, to magnify the commerce of the Lakes, to point your attention to the anticipated and accumulated freight of distant regions. We believe that they have anticipated much that will never be realized, but conceding all that they can claim or imagine, is not the difference in distance of the two routes so small, as to render their advantage over us in that trade trifling? Is it not so small that the southern route, if adopted, would secure *all* or *nearly* all the trade which the other route could secure! Is it not more than probable that the difference, if any, would be an evanescent, intangible, and invisible quantity? But how stands the question in reference to the southern trade? Is there not danger, and great danger, that when freights shall have reached a point so far north as Akron, that, invited by an easy and rapid descent to the Lake, and tempted by the golden charms of northern enterprise and speculation, they will be drawn into the vortex of the great commercial emporium of New York, or borne to the seductive marts of a rival power? Is it not the interest and policy of Philadelphia and Pittsburgh, to remove the field of contest for western commerce as far south as practicable? Again, should the western trade be borne upon the northern and flow into the Pennsylvania canal, would it not be subjected to greater loss of time and expense of toll and freight than by the southern route? But is it from the trade of the great Lakes, of Michigan, of Huron, of the *North* that Pennsylvania will enrich herself by the proposed communication? Can any great portion of that trade be wrested from the possession and enterprise of the north? No, never. It is from the eastern and midland counties of Ohio, from the fertile valleys of the Muskingum, Sciota, and Miami; from the teeming vales and luxuriant plains of the distant and growing *west* that Pennsylvania must draw commerce and wealth if she ever realizes them through any communication with our canal. By our route a direct avenue is opened to those boundless and augmenting sources of enterprise and wealth. It requires but the application of the golden key which your capital possesses, to unlock and enjoy our exhaustless resources. Ours possess immense advantages over the northern route, in the proximity to the line of stone, iron ore, and coal. Along nearly the whole length of the line on our route stone of excellent quality for building and for locks are exceedingly abundant.

Along the northern route there is believed to be a great scarcity of that important article. Again what claims has the northern route upon your attention in relation to the productions of its own neighbourhood that would float upon the proposed improvement to your markets, and the merchandize that would be received in return? Though a fertile and lovely country, it is emphatically a *grazing* country. For their cattle, horses, and mules, they find a cheaper conveyance than by canal transportation. Their remaining objects of exports are limited. We do not say that "scored salts and cheese" are *all*, though they certainly are *prominent* articles, and the quantity of the former of them must soon diminish.

Their commercial connexions are principally with New York, and there a large portion of them will remain, their project, if completed, affording both them and the Yorkers important facilities. Do you often recognize their faces in your streets, or welcome their custom in your stores and manufactories? Our commerce is with *you* and if the desired communication should be completed, with you it will forever remain. Our sympathies, our interest and feelings are with, you and our position, productions and resources all

invite more intimate associations and the most enduring connexion. To give you some idea of the productions and business of our county, its capabilities, its commerce and consumption, we present for your inspection and examination, several reports from our most intelligent and respectable citizens, in whose representations you may repose entire and perfect confidence. From these reports you may form some idea of our claims to your favourable notice, of the still stronger claims of the more fertile west; of the great, the growing advantages of the proposed communication.

You have placed us under obligation of gratitude for the exposure and inconveniences which you have suffered in a personal examination of our route, at an inclement and unpleasant season. Whatever may be the result of your examinations and deliberations, we doubt not that you will be governed by a serious desire to discharge with fidelity the important trust committed to your care, and, by an enlightened regard to all the great interests affected by your decision.

ANDREW W. LOOMIS,
WM. E. RUSSELL,
LEONARD HANNA,
B. W. SNODGRASS,
A. L. BREWER,
W. D. EWING,
J. L. WILLIARD,
WM. D. LEPPER, Jr.
HORACE POTTER,
CHARLES D. COFFIN.

(C)

Total No. of Stores in Columbiana county proper	101
Total No. of Stores in old Columbiana county	114
No. of Flouring Mills in Columbiana county proper	64
No. of Flouring Mills in old Columbiana county	73
No. of Saw Mills in Columbiana county proper	104
No. of Saw Mills in old Columbiana county	108
No. of Oil Mills in Columbiana county proper	5
No. of Oil Mills in old Columbiana county	6
No. of Distilleries in Columbiana county proper	65
No. of Distilleries in old Columbiana county	69
Total amount of the valuation of Columbiana county proper in 1833—	
\$1,488,743.	

Total amount of Chattel valuation in Columbiana county proper, exclusive of the valuation on Stores, in 1833, and comprises only Horses and Cattle over three years old—\$392,602.

The State of Ohio, } Auditor's Office,
Columbiana County, ss. } Nov. 19th, 1833.

It is hereby certified, that the foregoing list of Stores, Mills, &c. is correct as charged on the Books in this office. It may be proper here to state, that Horses and Cattle under three years are not taxable in this State; and that the above valuation is made at forty dollars per Horse, and Cattle at eight dollars per head.

WM. D. LEPPER, Jr.
Auditor, Columbiana County.